

IN THE CLAIMS:

1. (Currently Amended) A hybrid substrate comprising:
a substrate having a plurality of pockets patterned thereon; and
at least two different single crystal conductive materials deposited within a ~~respective~~
each pocket of the plurality of pockets for fabricating a plurality of devices.
2. (Currently Amended) The hybrid substrate according to Claim 1, wherein the at
least two different single crystal conductive materials are approximately co-planar with a top
surface of the substrate.
3. (Currently Amended) The hybrid substrate according to Claim 1, wherein the at
least two different single crystal conductive materials are bonded to the substrate.
4. (Currently Amended) The hybrid substrate according to Claim 1, wherein each of
the at least two different single crystal conductive materials is selected from the group consisting
of GaAs, InP, silicon wafer, optoelectronic devices, and GaN-based high-electron mobility
transistors (HEMTs).
5. (Original) The hybrid substrate according to Claim 1, wherein the substrate is
selected from the group consisting of AlN, quartz, glass, ceramic, CVD diamond, and sapphire.
6. (Original) The hybrid substrate according to Claim 1, wherein the substrate is a high
thermal conductive substrate.
7. (Cancelled)
8. (Previously Withdrawn) A method for fabricating a hybrid substrate comprising the
steps of:
· patterning a substrate with a plurality of pockets; and

providing a material within each of the plurality of pockets, wherein at least two materials provided within two respective pockets of the plurality of pockets are different.

9. (Previously Withdrawn) The method according to Claim 8, further comprising the step of planarizing the materials provided within each of the plurality of pockets, such that a top surface of the materials is approximately co-planar with a top surface of the substrate.

10. (Previously Withdrawn) The method according to Claim 9, wherein the planarizing step includes a chem-mech polishing step.

11. (Previously Withdrawn) The method according to Claim 8, further comprising the step of providing a thermal conductivity layer between the substrate and the material provided within each of the plurality of pockets.

12. (Previously Withdrawn) The method according to Claim 10, wherein the thermal conductivity layer is a CVD diamond layer.

13. (Previously Withdrawn) The method according to Claim 8, further comprising the step of providing a layer of oxide over the material provided within each of the plurality of pockets.

14. (Previously Withdrawn) The method according to Claim 13, wherein the layer of oxide is a layer of CVD oxide.

15. (Previously Withdrawn) The method according to Claim 8, further comprising the step of providing an oxide on at least one surface of each material before the step of providing the material within each of the plurality of pockets.

16. (Previously Withdrawn) The method according to Claim 8, further comprising the step of annealing to adhere the material provided within each of the plurality of pockets to the substrate.

17. (Previously Withdrawn) The method according to Claim 8, further comprising the step of preparing the material provided within each of the plurality of pockets with the blister separation method.

18. (Previously Withdrawn) The method according to Claim 8, further comprising the step of applying interconnect structures between the materials provided within the plurality of pockets.

19. (New) The hybrid substrate according to Claim 1, wherein each pocket of the plurality of pockets has a greater surface area than a surface area of a cross-section of the at least two different single crystal conductive materials deposited within that pocket.